

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re: Application No. 10/581,624)
)
Filed: April 17, 2007)
)
Applicants: Stefan Ingrisch et al.)
)
Title: AZETIDINE DERIVATIVES,)
METHOD FOR PRODUCING)
SAID DERIVATIVES AND USE)
THEREOF)
)
Art Unit: 1796)
)
Examiner: Gregory Listvoyb)
)
_____)
Attorney Docket: 8417/87870)
)
Customer No.: 22242)

Confirmation No. 3716

This Communication was electronically
filed on December 22, 2009 using the
USPTO's EFS-Web.

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

COMMUNICATION

Sir:

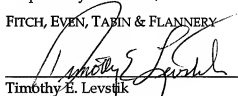
Further to our telephone conversation on December 22, 2009, we hereby enclose a copy of Attachment A previously submitted with an Amendment filed on September 28, 2009.

The Commissioner is hereby authorized to charge any additional fees which may be required in this application under 37 C.F.R. §§ 1.16-1.17 during its entire pendency, or credit any overpayment, to Deposit Account No. 06-1135.

Respectfully submitted,

FITCH, EVEN, TAIN & FLANNERY

Dated: December 22, 2009



Timothy E. Levstik

Registration No. 30,192

120 South LaSalle Street, Suite 1600
Chicago, Illinois 60603-3406
Telephone (312) 577-7000
Facsimile (312) 577-7007

A series of papers demonstrates that azetidinium salt is the active species in the polymerization of *N*-substituted azetidines [117,176,179,180]. The initiation can occur by the use of proton acids or by the azetidinium salt prepared separately [179]. Table 7 lists rate constants and thermodynamic data for azetidine polymerizations [179].

The polymerization of azetidinoils tends to yield low-molecular-weight polymers [169,180]. For example, in a study of the polymerization of 3-hydroxy-*N*-isopropylazetidine and 3-hydroxy-*N*-cyclohexylazetidine, regardless of initiator, \overline{DP}_n was <20 , \overline{M}_n was typically 2000 or less, and the intrinsic viscosity was about 0.07 dL/g [180]. The termination or transfer reactions in azetidinoil polymerization are not fully understood [179], although the polymer structures proposed are as follows:

